A 12

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,088	01/11/2002	Makarand P. Gore	10012212-1	7567

7590 06/03/2003

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER
KWOK, HELEN C

ART UNIT	PAPER NUMBER
2856	

DATE MAILED: 06/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/044,088	Applicant(s) Gore et al.
	Examiner H. Kwok	Art Unit 2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-16* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

In Figure 1, it appears that this figure should be labeled as -- Prior Art -- since it is described under the "Background of the Invention" section.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3-5 and 14-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, lines 2-3, the phrase "the anode reservoir" lacks antecedent basis. In line 3, the phrase "the anode reservoir" lacks antecedent basis.

In claim 4, lines 2-3, the phrase "the anode reservoir" lacks antecedent basis. In line 3, the phrase "the anode reservoir" lacks antecedent basis.

In claim 5, line 2, the phrase "the fuel solution in the anode reservoir" is not clear on its meaning. There is no mentioning that the anode reservoir contains the fuel solution. Please clarify.

In claim 14, lines 2-3, the phrases "the fuel solution in the anode reservoir" and "the fuel solution in the float chamber" are not clear on its meaning. There is no mentioning that the anode reservoir contains the fuel solution or the float chamber contains the fuel solution. Please clarify.

In claim 15, line 4, the phrase "a density-indicator means" is indefinite since there is no specified function to be performed.

In claim 16, lines 1-2, the phrase "a quantifying means" is indefinite since there is o specified function to be performed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 8-10 and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,061,839 (Kubler).

With regards to claims 1-3 and 8-9, Kubler discloses an indication of critical conditione of batteries in vehicles comprising, as illustrated in Figures 1-2c, a volume of fuel solution 4; a float 8 responsive to fuel solution density immersed in the fuel solution to determine the concentration of the fuel solution by the position of the float. Furthermore, Kubler discloses the fuel solution is contained within an anode reservoir 1; the fuel solution is contained with a float chamber 2 in fluid contact with the anode reservoir 1 and is separated by a semi-permeable filter membrane. Also, the floats the controls the release of the fuel solution when the float completes an electrical circuit 14,15. (See, column 1, lines 25-52; column 2, lines 6-14; column 3, line 10 to column 4, line 21).

With regards to claims 10 and 15-16, the claims are commensurate in scope with the above claims and are rejected for the same reasons as set forth above.

6. Claims 1, 10 and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 3,808,893 (Jinno et al.).

With regards to claims 1, 10 and 1-16, Jinno et al. discloses a densimeter comprising, as illustrated in Figure 2-3 and 5, a volume of fuel solution (i.e. methanol in a water solution); a float responsive to fuel solution density immersed in the fuel solution to determine the concentration of the fuel solution by the position of the float. (See, column 1, line 6 to column 5, line 19).

7. Claims 1-5, 7-10 and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 3,952,761 (Friedland).

With regards to claims 1-5 and 7-9, Friedland discloses a controlling density of liquids apparatus comprising, as illustrated in Figure 1, a volume of fuel solution (i.e. gasoline); a float 7 being part of a hydrometer 15 as a fuel indicator bar is responsive to fuel solution density immersed in the fuel solution to determine the concentration of the fuel solution by the position of the float. Furthermore, Kubler discloses the fuel solution is contained within an anode reservoir 1; the fuel solution is contained with a float chamber 5 in fluid contact with the anode reservoir 1 and is separated by a semi-permeable filter membrane 4 or a fuel channel (i.e. a central pipe) having a semi-permeable filter membrane. Also, the floats the controls the release of the fuel solution when the float completes an electrical circuit through control head. (See, column 1, line 6 to column 4, line 34).

With regards to claims 10 and 15-16, the claims are commensurate in scope with the above claims and are rejected for the same reasons as set forth above.

Claim Rejections - 35 USC § 103

8. Claims 6 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Kubler or Friedland in view of U.S. Patent 6,408,694 (Lin et al.).

With regards to claims 6 and 11-14, the references, Kubler and Friedland, does not explicitly teach viewing the position of the float through a transparent window. Lin et al.

discloses a liquid density monitoring device comprising, as illustrated in Figures 1C-2, a float chamber 62 made of transparent material of either glass or plastic having a float 76 and density indicator positioned within the float chamber such that the position of the float can be viewed through the float chamber (like a transparent window since the chamber itself is made of a transparent material). It would have been obvious to a person of ordinary skills in the art at the time of invention to have readily recognize the advantages and desirability of employing a transparent window as suggested by Lin et al. to the apparatus of either Kubler or Friedland to view the position of the float instead of using a display of some type (i.e. LED, graphs, meters) since this is a mere design choice of the manufacturer or operator how one wants to view the position since the overall results is the same, namely to obtain a position of the float to determine the density and concentration of the test material without changing and/or altering the performance and/or operation of the device.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art cited are related to density and concentration measurements using floats.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen Kwok whose telephone number is (703) 308-8149.

HELEN KWOK
PRIMARY EXAMINER